

Amphibole Thermobarometers

| Reference | Name in Thermobar | T-dependent? | P-dependent? | H ₂ O-dependent? |
|--|------------------------|--------------|--------------|-----------------------------|
| Amphibole-Liquid Barometry. Function “calculate_amp_liq_press” | | | | |
| Putirka (2016) | P_Put2016_eq7a | X | | ✓ |
| | P_Put2016_eq7b | X | | ✓* |
| | P_Put2016_eq7c | X | | ✓* |
| Amphibole-Liquid Thermometry. Function “calculate_amp_liq_temp” | | | | |
| Putirka (2016) | T_Put2016_eq4b | | X | ✓ |
| | T_Put2016_eq4a_amp_sat | | X | ✓* |
| | T_Put2016_eq9 | | X | ✓* |
| Amphibole-only Barometry. Function “calculate_amp_only_press” | | | | |
| Ridolfi and Renzulli (2012) | P_Ridolfi2012_1a | X | | X |
| | P_Ridolfi2012_1b | X | | X |
| | P_Ridolfi2012_1c | X | | X |
| | P_Ridolfi2012_1d | X | | X |
| | P_Ridolfi2012_1e | X | | X |
| Ridolfi et al. (2010) | P_Ridolfi2010 | X | | X |
| Hammarstrom & Zen (1986) | P_Hammerstrom1986_eq1 | X | | X |
| | P_Hammerstrom1986_eq2 | X | | X |
| | P_Hammerstrom1986_eq3 | X | | X |
| Hollister et al. (1987) | P_Hollister1987 | X | | X |
| Johnson & Rutherford (1989) | P_Johnson1989 | X | | X |
| Blundy et al. (1990) | P_Blundy1990 | X | | X |
| Schmidt (1992) | P_Schmidt1992 | X | | X |
| Anderson & Smith, 1995 | P_Anderson1995 | ✓ | | X |
| Krawczynski et al.(2012) | P_Kraw2012 | X | | X |
| Amphibole-only Thermometry. Function “calculate_amp_only_temp” | | | | |
| Putirka (2016) | T_Put2016_eq5 | | X | X |
| | T_Put2016_eq6 | | X | X |
| | T_Put2016_SiHbl | | X | X |
| | T_Put2016_eq8 | | ✓ | X |
| Ridolfi and Renzuli, 2012 | T_Ridolfi2012 | | ✓ | X |
| ✓* H ₂ O-dependence because of parameterization in terms of hydrous fractions, not a specific H ₂ O-term | | | | |
| Other Functions | | | | |
| calculate_amp_liq_press_temp: Iteratively solves P and T for liquid-amphibole pairs | | | | |
| calculate_amp_only_press_temp: Iteratively solves P and T using just amphibole compositions. | | | | |